tively). **CONCLUSIONS:** Patients treated with CANA in dual therapy experienced an additional 0.21 QALYs over 40 years versus patients treated with GLIM. The primary drivers were improved weight while on agent and fewer hypoglycaemic events.

PDB61

COST-EFFECTIVENESS OF INSULIN DETEMIR IN T2DM PATIENTS POORLY CONTROLLED WITH NPH INSULIN IN POLAND

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OBJECTIVES: In Poland, where long acting insulin analogues (LAA) are not currently reimbursed in T2DM, it is crucial to select a group of patients for whom LAA may be particularly preferred. Based on NICE recommendation such patients are those treated with human insulin (NPH) but not achieving glycaemic control. Thus the aim of this study was to evaluate the cost-effectiveness of insulin detemir (IDet) when compared to NPH in subpopulation of poorly controlled T2DM as defined by HbA1c ≥8% and/or ≥1 episode of severe or nocturnal hypoglycemia recorded during ≥6 months of NPH treatment. **METHODS:** A validated computer simulation of diabetes model (IMS-CORE) was used to project long-term clinical and economic outcomes. Clinical effects in HbA1c improvement, BMI change and reduction in hypoglycemic episodes were modelled. Analysis was based on findings from the subgroups of the *PREDICTIVE* study – a real-world data trial – that closely reflects the defined target population. Two distinct insulin therapy regimens with IDet and NPH were evaluated: basal-supported oral therapy (BOT) and a basal-bolus (BB) regimen. Baseline cohort characteristics, disease progression and utility estimates were obtained from systematic literature review. Costs were obtained from Polish published data. The analysis was conducted from a public payer and patient perspective over a lifetime time horizon. Discount rates were 5% (costs) and 3.5% (outcomes). **RESULTS:** The mean QALY gain resulting from treatment initiation with IDet compared with NPH was 0,311 (BOT) and 0,451 (BB). Base-case incremental cost-effectiveness ratios (ICERs) were 38,136 PLN/QALY (9,113€) and 13,726 PLN/QALY (3,280€), respectively. At the current ICER threshold of 105,801 PLN/QALY (25,281€) in Poland, probability of IDet being cost-effective compared to NPH is 95% (BOT) and approaching 100% (BB). **CONCLUSIONS:** Based on generally accepted cost/QALY threshold values in the Polish settings, IDet was found to be a cost-effective option for T2DM patients with inadequately controlled diabetes.

PDB62

COST-EFFECTIVENESS ANALYSIS OF INSULIN DEGLUDEC COMPARED WITH CURRENT STANDARD OF CARE IN THE MANAGEMENT OF TYPE 1 AND TYPE 2 DIABETES MELLITUS IN THE SPANISH HEALTH SYSTEM

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OBJECTIVES: Insulin degludec (IDeg) is a basal insulin with an ultra-long duration of action for management of patients with type 1 (T1DM) and patients with type 2 (T2DM) diabetes. IDeg have demonstrated efficacious blood glucose control with less hypoglycaemic events and with an option for flexibility in dose time compared insulin glargine (IGlar). The objective was to assess the cost-effectiveness of IDeg in Spain, compared with IGlar. The analysis focused on subgroups of patients within three treatment regimens: T1DM, T2DM treated with basal insulin in combination with oral anti-diabetics (BOT) and T2DM treated with basal-bolus (BB). **METHODS:** A one-year cost-utility model driven by differences in hypoglycaemia was used. Two alternative utility approaches were used: in the first case, the utility gain was elicited from the clinical trials. In the second, published dis-utilities for hypoglycaemic events and self-monitoring blood glucose tests were used to calculate QALYs. Cost and utilities were also estimated for potential use of less blood glucose test strips. Three subgroups were analysed: those using twice daily IGlar, those with high risk of severe hypoglycaemia, and those obtaining extra utility from dosing flexibility. Unit costs pertained to public tariffs and reflected the payer perspective. Baseline incidence rates of hypoglycaemia and related resource use was derived from a Spanish observational study. **RESULTS:** IDeg was dominant for T1DM, T2DM BOT and T2DM BB switching from twice daily. T2DM BOT with high risk of hypoglycaemia was also dominant. As for patients benefiting from dosing flexibility the cost/QALY were 6,921€/QALY in T1DM, 9,244€/QALY in T2DM BOT, and 33,099€/QALY in T2DM BB. The use of the two different utility methods gave similar results. Univariate and probabilistic sensitivity analyses confirmed robust results. **CONCLUSIONS:** This analysis demonstrates that IDeg is a cost-effective option in Spain, when used in sub-groups of patients currently treated with long-acting insulin.

PDB63

EVALUATING THE COST-UTILITY OF FENOFIBRATE TREATMENT OF DIABETIC RETINOPATHY IN AUSTRALIA

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OBJECTIVES: Evidence from the landmark trials FIELD and ACCORD demonstrated that fenofibrate significantly reduces rates of diabetic retinopathy (DR) progression in type 2 diabetes patients (T2DM). This study evaluates the long-term cost-effectiveness of fenofibrate mono- and combination therapy for DR in Australia. **METHODS:** A seven-state Markov model simulated progression of DR based on data from the Blue Mountain Eye Study. Risk reductions for retinopathy progression were derived from FIELD for fenofibrate monotherapy (vs. placebo) and ACCORD for fenofibrate+statin (vs. statin alone). No additional benefits were assumed beyond 5 years (DR progression was the same with/without fenofibrate after year 5). Quality-adjusted life expectancy, direct costs and incremental cost-effectiveness ratios (ICERs) were reported over 10 years. Unit costs (2012 Australian dollars, AUD), resource use and utilities were taken from country-specific sources/expert opinion. Future costs and clinical benefits were discounted at 5% annually. Sensitivity analyses were performed. **RESULTS:** Fenofibrate monotherapy improved mean quality-adjusted life expectancy by 0.09 QALYs versus placebo due to fenofibrate patients spending more time in mild DR states. Direct medical costs were AUD 898 higher for fenofibrate monotherapy, with additional treatment costs partially offset by reduced cost associated with advanced DR (e.g. ophthalmologist time and laser treatment), leading to an ICER of AUD 10,221 per QALY gained. Similarly, fenofibrate+statin led to an improvement of 0.05 QALYs versus statin alone with an incremental direct cost of AUD 1,707. The ICER for fenofibrate+statin was AUD 33,350 per QALY gained versus statin alone. Sensitivity analysis showed that results were relatively insensitive to changes in a range of assumptions. **CONCLUSIONS:** The reduced risk of DR progression associated with fenofibrate treatment was projected to improve quality-adjusted life expectancy, with treatment costs partially offset by reduced costs of retinopathy care. ICERs indicated that fenofibrate therapy was in the range likely to be considered cost-effective in Australia.

PDB64

COST-EFFECTIVENESS OF INSULIN DEGLUDEC COMPARED WITH INSULIN GLARGINE IN A BASAL-BOLUS REGIMEN IN PATIENTS WITH TYPE 1 DIABETES MELLITUS IN THE UNITED KINGDOM

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OBJECTIVES: Insulin degludec (IDeg) is a basal insulin with an ultra-long duration of action for the management of patients with type 1 (T1DM) and patients with type 2 (T2DM) diabetes. IDeg has demonstrated effective blood glucose control with less hypoglycaemic events and with an option for flexibility in dose time compared to insulin glargine (IGlar). The aim of this analysis was to evaluate the cost-effectiveness of IDeg versus IGlar in adults with T1DM in the UK. **METHODS:** Meta-analysis data from two phase III clinical studies were used to populate a simple, transparent short-term model. The analysis was conducted from the UK National Health Service perspective and costs and benefits were calculated over a 12-month period. Sensitivity analyses were conducted to assess the degree of uncertainty around the results. In order to test the robustness of the results, two versions of the model were used. One applied disutilities derived from the SF-36 questionnaire used in the clinical trials, the other applied disutilities associated with the occurrence of hypoglycaemic events. In both approaches an additional utility gain was attributed to the benefit of dosing flexibility. Baseline incidence of hypoglycaemia was taken from a real-life study from the UK. Resource use associated with hypoglycaemia was documented in the clinical trials. Published tariffs were used as unit costs. **RESULTS:** The base-case ICERs were £12,637/QALY and £13,349/QALY in the two modelling approaches, which are below commonly accepted thresholds for cost-effectiveness. The results were robust and largely insensitive to changes in input parameters. **CONCLUSIONS:** This short-term modelling approach allows the economic evaluation of newer insulin analogues when advanced long-term modelling based on HbA_{1c} differences is inappropriate due to the treat-to-target nature of the clinical trials resulting in equivalent HbA1c levels. For patients in the UK with T1DM IDeg is a cost-effective treatment option compared with IGlar.

PDB65

COST-EFFECTIVENESS OF INSULIN DEGLUDEC COMPARED WITH INSULIN GLARGINE FOR PATIENTS WITH TYPE 2 DIABETES MELLITUS INITIATING INSULIN THERAPY IN THE UNITED KINGDOM

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OBJECTIVES: Insulin degludec (IDeg) is a basal insulin with an ultra-long duration of action for management of patients with type 1 (T1DM) and patients with type 2 (T2DM) diabetes. IDeg has demonstrated effective blood glucose control with less hypoglycaemic events and an option for flexibility in dose time compared to insulin glargine (IGlar). The aim of this analysis was to evaluate the cost-effectiveness of IDeg versus IGlar in adults with T2DM initiating insulin therapy in the UK. **METHODS:** Meta-analysis data from three clinical studies were used to populate a 1-year cost-utility model. The analysis was conducted from the UK National Health Service perspective. Sensitivity analyses were conducted to assess the robustness of results. Two versions of the model were tested, one applied disutilities derived from the SF-36 questionnaire used in the clinical trials, the other applied disutilities associated with the occurrence of hypoglycaemic events. In both approaches an additional utility gain was attributed to the benefit of dosing flexibility. Baseline incidence of hypoglycaemia was derived from a UK real-life study. Resource use associated with hypoglycaemia was documented in the clinical studies. Official tariffs were used as unit costs. **RESULTS:** Base-case ICERs were £15,705/QALY and £13,003/QALY in the two modelling approaches. Results were robust, with baseline rate of hypoglycaemia a key driver of results. Using hypoglycaemia rates from a subgroup of patients who experienced ≥1 hypoglycaemic event per year IDeg was highly cost-effective versus IGlar; with estimated ICERS of £4,706/QALY and £2,528/QALY. **CONCLUSIONS:** This short-term modelling approach allows the economic evaluation of newer insulin analogues when advanced long-term modelling based on HbA_{1c} differences is inappropriate due to treat-to-target trial design. For patients with T2DM on a basal-only insulin regimen, IDeg is cost-effective compared with IGlar and offers additional benefits to subgroups of patients, such as those suffering from recurrent hypoglycaemia.

PDB66

THE COST-UTILITY OF INSULIN DEGLUDEC COMPARED WITH CURRENT STANDARD OF CARE IN THE MANAGEMENT OF TYPE ONE AND TYPE TWO DIABETES MELLITUS IN BELGIUM

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